## **REMARKS/ARGUMENTS**

The Examiner has rejected claim 1 under 35 U.S.C. 102(e) as being anticipated by Wang et al. (U.S. Publication No. 2002/0034213). Please find enclosed Applicant's Rule 37 CFR 1.131 Affidavit. It is respectfully submitted that the Affidavit establishes a date of invention prior to the 35 U.S.C. 102(e) date of the Wang reference, namely its U.S. filing date of July 30, 2001. It is further respectfully submitted that due diligence has been established in the preparing and filing of a patent application, in particular from the July 30, 2001 date of the reference, to the filing date of the U.S. provisional application upon which this application is based, namely Provisional Application No. 60/329,509 having a filing date of October 17, 2001. It is further submitted that to the extent that the claims of the subject application may not supported by the provisional application, due diligence was exercised between the 35 U.S.C. 102(e) date of the reference and the filing date of the regular U.S. application of January 8, 2002.

This effectively removes Wang from citability. Most of the 35 U.S.C. 102 and 103 rejections were based on Wang. It is respectfully requested that all of the objections based on Wang be withdrawn.

In paragraph 18 of the detailed action, the Examiner has rejected claim 12 under 35 U.S.C. as being unpatentable over Wu et al. in view of Rabinowitz et al.

The subject matter of Wu et al. was, at the time the invention was made, subject to an obligation of assignment to Nortel Networks Limited as was the subject matter of the application under examination. Both inventions were made by the employee's of Nortel Networks in the normal course of their employment with Nortel Networks. Assignments from the inventor's to Nortel Networks have been filed on both matters.

For application No. 09/750,804 this is recorded at reel/frame 011599/0098 and the assignment for the subject application was recorded at reel/frame 012763/0796.

As such, the reference and the subject application satisfy the requirements for rendering the reference uncitable in accordance with 35 USC 103(c) as follows:

- a) the subject matter only qualifies as prior art under 35 USC 102(e);
- b) the subject matter and the claimed invention were, at the time the invention was made, owed by the same person of subject to an obligation of assignment to the same person, namely Nortel Networks Limited.

In view of this, the 35 U.S.C. 103(a) rejections that rely upon Wu et al. should all be withdrawn.

In paragraph 4 of the detailed action the Examiner has rejected claims 11 and 13 under 35 U.S.C. 102(e) as being anticipated by Wu et al.

Before setting forth a discussion of the prior art applied in the Office Action, it is respectfully submitted that controlling case law has frequently addressed rejections under 35 U.S.C. § 102. "For a prior art reference to anticipate in terms of 35 U.S.C. Section 102, every element of the claimed invention must be identically shown in a single reference." Diversitech Corp. v. Century Steps, Inc., 850 F.2d 675, 677, 7 U.S.P.Q.2d 1315, 1317 (Fed. Cir. 1988; emphasis added). The disclosed elements must be arranged as in the claim under review. See Lindemann Machinefabrik v. American Hoist & Derrick Co., 730 F.2d 1452, 1458, 221 U.S.P.Q. 481, 485 (Fed. Cir. 1984). If any claim, element, or step is absent from the reference that is being relied upon, there is no anticipation. Kloster Speedsteel AB v. Crucible, Inc., 793 F.2d 1565, 230 U.S.P.Q. 81 (Fed. Cir. 1986; emphasis added). The following analysis of the present rejections is respectfully offered with guidance from the foregoing controlling case law decisions.

The Examiner has pointed to Figure 2 and paragraphs 18 and 63 of Wu in support of his rejection of claim 11. Figure 2 shows an OFDM symbol having plurality of sub-carriers (Figure 2) but there is no reference to pilots in the discussion of Figure 2. There is a discussion in paragraphs 18 and 63 of the insertion of pilots. However, neither of these excerpts nor Figure 2

teach that pilot symbols are inserted in an <u>identical</u> scattered pattern in time-frequency for each antenna. In fact there is no detail on the nature of the insertion of the scattered pilots at all.

As for the discussion of claim 13, note that the <u>continual</u> pilot sub-carriers taught in the reference clearly are not the same as scattered pilot pattern being recited in claims 11 and 13. That is what "scattered" means, namely scattered in both time and frequency. A pilot that is continuous in frequency is not scattered in frequency.

In view of the fact that a key limitation in these claims is not taught in the cited reference, the Examiner is respectfully requested to withdraw the 35 U.S.C. 102(e) rejection of claims 11 and 13 which depends upon claim 11.

In view of the foregoing, early favorable consideration of this application is earnestly solicited.

Respectfully submitted,

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